CHAPTER I.

A SURVEY OF THE PRE-PĀṆINIAN GRAMMATICAL THOUGHT IN THE MATTER OF THE VERBAL ROOT

The most important discovery in the history of Sanskrit Grammar is the abstraction of the verbal root - a discovery which took place long before Pāṇini compiled his Dhātupāṭha, the oldest of its kind that has come down to us.

The interest evinced by the Indians in the phenomenon of language goes back to a very distant past. Traces of the consciousness of some relationship between certain forms of the language are found in very old Sanskrit literature, indeed including even the oldest Saṁhitās. When, for instance, the Vedic poet describes Aśvins as aśnantau 'the consumers' and puts the two words in juxtaposition,[1] we see that the similarity between the two words had already struck him, or when he describes the Maruts as 'ye sahāṁsi sahasā sahante'[2] ('who, with power, overpower the powers (of their enemies)' it is clear that he was vaguely aware of (and perhaps wanted deliberately to give an expression to) the relationship obtaining in these three concrete forms. It will, of course, be too much to suppose that he had grasped the exact relationship between these forms - i.e. he had reduced the forms to a common verbal root and had separated the various endings and determined their functions. The tendency to etymologize words is a basic one, as is evidenced by the folk-etymologies found all the world over, and it is no wonder that the Vedic seers, dealing as they did with one of the most transparent of languages, became aware,

although in a hazy way, of the formal relationships between cognate words.

If we come to the later Saṁhitās we find that a further step is taken here. Here we see that not only the relationship between certain forms has struck the poet, but that he is also consciously trying to define that relationship. This usually takes the form of explaining the significance of a name. A striking instance of this phenomenon is found in the Atharvaveda 3,13 where in the first four stanzas four synonyms of the word 'water' are explained. The waters are called 'nadyaḥ', 'roarers', says the poet, because they roared (anadatā) when the dragon was killed; āpaḥ 'acquisition', because Indra acquired (āpnot) them; vār 'choice', because Indra chose (avīvarata) them; and udakam 'upbreather' because the Great Ones breathed up (udāniṣuḥ) on their account. These etymologies, which are given right in the spirit of the Brāhmaṇas and the Nirukta, are remarkable for two reasons : firstly, the formula in which they are given (yad ..... tasmāt) clearly shows that the poet is consciously trying to explain the significance of the name, and that he is putting it in a logical form; secondly, the origin of all the four names is accounted for by showing that these various names literally mean doers or objects of certain actions which the rivers, who bear those names are, as a matter of fact, known to have done or undergone.

The tremendous potentialities of these etymologies are evident enough. We clearly see that they already forestall the typical etymologies of the Brāhmaṇas which later developed into a full-fledged science, such as is represented by Yāska's

Nirukta.[2A] That some of the etymologies may be - and in fact some are - false, is self-evident. What is important, however, is that they indicate that the Vedic Aryans were already beginning to have a glimpse into the rich and complicated structure of the Sanskrit language; that they had begun to perceive that some of the words which were used as names were connected with - in fact, based upon, - some other words which were used to denote actions. Thus the phenomenon that things get their names usually from some prominent action connected with them had already begun to attract notice. And from this belief, that names of the things are based upon their actions, it is just a step to the grammatical doctrine that nouns are derived from verbs, once a person becomes linguistically conscious.

This interest in the language grew in the days of the Brāhmaṇas. The tendency to seek the derivations of words is here on the increase. In fact it seems to be a very favourite occupation of the authors of the Brāhmaṇas. According to Liebich's calculation there are 49 derivations in the first six books of the Aitareya Brāhmaṇa.[3] Many of these derivations are, as was to be expected, quite crude but, as Liebich has pointed out, it is a mistake to suppose that the authors themselves were not serious with these derivations. The solemn manner in which these are given in more or less all the Brāhmaṇas, and the acceptance of these later on by Yāska rather shows that the etymologies were given in all earnest and that they represent the standard of linguistic knowledge attained in those days.[4]

Among the etymologies of this period there are some

which are remarkable for the form in which they are given. Taittirīya Saṁhitā II. 4,12,2, for instance, reads thus : sa imān lokān avṛṇot, yad imān lokān avṛṇot tad vṛtrasya vṛtratvam 'He surrounded these worlds; that is the Vṛtra-ness of Vṛtra in that he surrounded (avṛṇot) these worlds'. Similarly the AB I.2,1 says : yad iṣṭibhiḥ praiṣam aicchaṁs tad iṣṭīnām iṣṭitvam, 'Since (the gods) desired (aicchan) to search (the sacrifice) by means of the iṣṭis, therein lies the iṣṭiness of the iṣṭis'. Here the two words Vṛtratva and iṣṭitva are worth noting for they show that the author has here effected a two-fold isolation : firstly, the stems vṛtra and iṣṭi have been abstracted from a large number of concrete forms like vṛtraḥ, vṛtram, vṛtreṇa etc. in one case, and iṣṭiḥ, iṣṭim, iṣṭyā etc. in the other - which concrete forms alone must have actually occurred in the language; secondly, the suffix -tvá is also separated from the concrete forms ending in this suffix. Another evidence in support of this separation of the stem and the suffix is the use of the possessive suffixes -mat and -vat in the Brāhmaṇas.[5] When, e.g. a verse containing the word pitṛbhiḥ is described in the AB III,3,8 as pitṛmat,[6] we clearly see that here the stem pitṛ is separated both from the ending -bhiḥ and the suffix -mat. This separation of the stem and the suffix is the first important strictly grammatical achievement which followed in the wake of the etymological speculations. It must have been quite a discovery in those early days and it is probably this achievement which is recorded in the Taittirīya Saṁhitā VI,4,7,3 where it is said that the speech was formerly unanalysed, and that Indra, at the request of the

gods split it in two and analysed it.[7]

Let us pursue the instance of the word Vṛtra a bit further. Having arrived at this basic form - the stem - which they knew literally meant 'one who surrounds', it could not have taken long to the authors of the Brāhmaṇas, now that they were linguistically conscious, to come to the conclusion that the word Vṛtra combined in it two elements, one which expressed 'the action' of surrounding, and the other 'the doer' of that action. And since the word-element vṛ was found to be present (in its original or altered form) in the concrete forms like vṛṇoti, vṛṇute etc., this fact might have led them to come to the conclusion that the element vṛ meant 'surround', and the element tra 'the doer' (of the action concerned).[8]

There is another circumstance which might have helped to bring the idea of the verbal root in bold relief. The style of the Brāhmaṇas is marked with constant repetitions of set phrases and sentences. It often happens that these repeated phrases and sentences contain either related forms (i.e. forms derived from the same root) or similar forms derived from different roots. The constant repetition of these related or similar forms might have been responsible for focussing the attention on the common element in these forms (i.e. the roots) on the one hand and the case-endings and the suffixes on the other. To take a concrete instance : In the AB VII,14 the juxtaposition yajai : yajasva occurs six times; in VII, 15 the juxtaposition uvāca : avocat similarly occurs five times, and cara : cacāra equal number of times

(besides three occurrences of caratah, four of caran, and one of carāti). Of particular interest are the series of forms made from a few roots representing the Present (Indicative and Imperative), Perfect and Aorist. They are given below :

Root	Pres. Ind.	Pres.Imp.	Perf.	Aor.
/jan	-	jāyatām	jajñe	ajani
"	jāyante	jāyantām	jajñire	ajñata
"	punar - jāyante	punar-jāyantām	punar-jajñire	punar-ajñata
/pad	padyante	padyantām	pedire	apatsata
/as and /bhū	bhavati	astu	āsa	abhūt
āp	--	prāpnotu	prāpat	prāpnot

Regarding /jan (which, by the way, shows here the maximum number of forms) it is worth noting that the A;B; VII,13 gives the etymology of the word jāyā, saying that a wife is so called because the husband, in the form of the son, is once more born (jāyate) in her, and links the word with jananī in the next stanza. It is easy to see how all this must have had a hand in pointedly drawing the attention to the common verbal element in the related forms.

But though the authors of the Brāhmaṇas had thus become conscious of the verbal root, they were not yet successful in giving an exact expression to it. Though they had grasped the idea mentally, they did not know how to give a concrete shape to it. This is clear from the indirect methods employed by them in referring to a root. Usually when the

Brāhmaṇas want to refer to a Vedic stanza as containing a word derived from a particular root, they make use of the past participle of that root.[9] Thus a ṛc containing the word ud-ajani is said to be jātavat (A.B; I,16,3). The various forms themselves, both nominal and verbal, are similarly described, januṣā (V,5,2), janayanta (V, 5,16) and ajījanat (V,16,4) all being likewise described as jātavat; yuñjante (IV, 29,3) and yunajmi (V, 4,2) are said to be yuktavat; paryāsa (V,1,3) is said to be paryastavat and so on.

But, besides the past participle, other forms also have been requisitioned for this purpose. Thus, naya is described as netṛmat (I, 10,1), jaṅghanat as jaghnivat (I, 25,8), huvema as havavat (V,4,14), pibatu as pibavat (III, 29,5), and kṣayanta as kṣetivat (V, 20,4). According to Liebich's calculation, the proportion of the cases of past participles thus used to those of all the other forms put together is about 50 : 50 in the A.B.[10] In the later Brāhmaṇas the past participle begins to get the upper hand until it almost ousts out other forms.

It seems reasonable to infer that originally (i.e. before the days of the A.B.) these formations with -vat, whether from the past participles or from the agent-nouns and action-nouns, denoted only those particular forms. Thus e.g. the expressions jātamat and netṛmat originally probably meant only 'a ṛc containing the word jāta'[11] and 'a ṛc containing the word netṛ ' respectively. From this original significance their use seems to have been extended so as to

refer to the verbal root which is the basis of these forms.

But the question is : How did the past participle alone, out of a host of forms, come gradually to be preferred more and more, so much so that in the later Brāhmaṇas it almost crowded out all other forms ? This question has not been answered satisfactorily. It is suggested that the authors of Brāhmaṇas picked this form because it was such as almost never failed to occur in the actual language.[12] It is also worth considering whether the circumstance, viz. that the past participle almost always contains in it, so to say, the root - the weak form which has all along been regarded by the Indian grammarians as the root proper - whether this circumstance might not have unconsciously influenced the choice of this form to indicate the root.

Whatever might be the origin of this selection of the past participle to represent the root, one thing is sure, that it has left its stamp upon some of the pre-Pāṇinian grammatical terms. The very word ākhyāta, the oldest term meaning 'root', is evidently formed under the influence of this Brāhmaṇic method. Similarly kārita 'causal', cikīrṣita 'desiderative', cekrīyita 'frequentative with -ya' and carkarīta 'frequentative without -ya' - all these terms which were originally participle formations from the respective stems (causal etc.) of /kṛ and were subsequently chosen to represent those particular formations - these terms likewise owe their origin to the practice of the Brāhmaṇas to represent the root by the past participle.

This method of denoting the root by the past participle seems to have fallen in disuse after the Brāhmaṇa period. We come across it in Nirukta VII,14 where Yāska quotes the view of Śākapūṇi regarding the derivation of the word agni thus : tribhya ākhyātebhyo jāyata iti Śākapūṇih, itād, aktād dagdhād vā, nītāt.[7] Yāska then goes on to explain this view and during the course of the explanation paraphrases the words itād, aktād and dagdhād by eteḥ, anakteḥ and dahateḥ respectively. Śākapūṇi was evidently a predecessor of Yāska and used the method current in his days, while Yāska himself uniformly employs the new method of using 3 sing. Pres. to denote the root, a method which, it might be noted incidentally, already makes its appearance in the form kṣetivat of the A.B. (V,20,4).

From the Brāhmaṇas we pass on to the Nighaṇṭu which belongs more or less to the same period. The importance of the Nighaṇṭu for our study of the Sanskrit verb lies in the circumstance that it is the earliest known systematic work clearly dividing the words of the Sanskrit language into the groups of nouns, verbs and particles. It is true that these technical terms themselves do not appear here;[13] also that the distinction between the nominal and verbal forms has not been always accurately observed, seeing that nominal forms of various originations like cakamānaḥ (II,6), ākṣāṇaḥ and āpānaḥ (II,18), taḷit and ākhaṇḍalaḥ (II,19), vicarṣaṇiḥ and viśvacarṣaṇiḥ (III,11) are given under verbs while, on the other hand, evidently verbal forms like vavakṣitha and vivakṣase (III,15) are given under nouns; still the credit

of consciously analysing the words and arranging them in the synonymous groups of nouns and verbs for the first time - in other words the character of a linguistic work as such - cannot be denied it.

Restricting ourselves to the verbs, we notice that in the first three chapters of the Nighaṇṭu in all 313 verbal forms[14] are given in 15 synonymous groups, besides another 12 verbal forms in the chapter IV which are given without any meaning. The root is here represented, as a rule, by the form of the 3 sing. Pres., in the Parasmaipada or the Ātmanepada, as the case may be. But there are exceptions to it, particularly in the case of the Vedic verbs, where the root is represented by other form or forms, and belonging to various persons, numbers, tenses and moods,[15] - in other words, by forms directly picked up from the Veda and introduced here without any alteration.

Whereas the Nighaṇṭu could be said to constitute, in a way, an advance over the Brāhmaṇas since it generally reduces verb-forms to a particular one, viz. the 3 sing. Pres.,[16] which becomes the reigning type in the later works like the Nirukta, there is hardly anything to prove that the Nighaṇṭu had fully isolated the verbal root. Not only the circumstance that nowhere does the root appear in its bare form, but also the manner of presenting the verb-forms leads us to believe that the compiler of the Nighaṇṭu had not yet penetrated beyond the concrete forms. Sometimes, as said above, the compiler gives forms like īmahe (III,19), tāḷhi (II,19), abhy arṣa (III,21) etc. without reducing them to the usual 3 sing. Pres.,

probably because he was not sure of that form: while, on the other hand, besides giving this usual representative form he also gives some other forms belonging to the same root. Thus beside the form aśnute, he also gives aśat, āṣṭa, ānaśe and ānaṭ (II,18): beside vaṣṭi, also vaśmi and uśmasi (and also the nominal form uśik!) (II,6): beside babhasti, also bapsati, bhasathaḥ and babdhām (II,8). One can understand that ānaśe could have been found difficult to connect with aśnute, or uśhmasi to vaṣṭi: but why should vaśmi occur side by side with vaṣṭi, or vicaṣṭe side by side with caṣṭe (III,11) ? We have either to suppose that the compiler had not as yet fully grasped the exact relationship between these connected forms, - which, in some cases at least, e.g. vaśmi : vaṣṭi, is a bit incredible - or that he wanted to bring together these allied forms deliberately so as to facilitate understanding of the correct meaning of the verb. But as he gives more than one form only for a few roots and not a matter of general policy, and as even here he gives only a few forms and not all those which have actually occurred, it would be best to surmise that he was aware of some relationship between these but had not abstracted the root lying at the bottom of these forms.

It is interesting to note that not all the verbs listed in the Nighaṇṭu have actually appeared in the Veda. Indeed there are some, like kaṇṭati, kavate, kṣumpati, gavate, drūḷati, dhrati, dhrayati, dhrāti, bisyati, misyati, śavati, svātrati, syamati etc., - to pick up only a few from only one group, viz. II, 14 - which are not only not

found in the Veda, but are not found anywhere even in the later literature (excepting, of course, the grammatical works). It has been suggested that such verbs are artificial creations, being coined to explain nominal derivatives and that this would indicate that long before the Nighaṇṭu the etymologists were busy deriving nouns from assumed verbs.[17]

Another feature to be noted about these lists of verbs is that such verbs of common occurrence in the RV as kṛṇoti, cinoti, tarati, dadāti, dadhāti, nayati, yacchati, yajati, - to quote only a few glaring instances - are not met with in the Nighaṇṭu which shows that the lists were by no means meant to be exhaustive. On the whole it can be certainly said that since the Nighaṇṭu embodies the idea of giving lists of roots with their meanings, and incidentally it also indicates the present-stem and the voice by means of the concrete form of the root, it can well be regarded as containing the germs of the later Dhātupāṭhas.

From the Nighaṇṭu we pass on to the Nirukta of Yāska, a commentary on the same and which, in the field of ancient Indian Linguistics, stands next in importance only to that wonderful work, Pāṇini's Aṣṭādhyāyī. It is rich in material suggestive of the pre-Pāṇinian stage of grammatical activity obtaining in the days of the Nirukta, out of which we will naturally restrict ourselves here to the part connected with the study of the Sanskrit verb .

The first and the foremost point that must be noted at the outset is that here the verbal root is seen to be already fully abstracted. It is true that Yāska usually cites

the root in the form of the 3 sing. Pres., but this practice is evidently followed out of convenience, a practice which continues long after Pāṇini - in fact even to the present day. In II,1 Yāska notes some grammatical phenomena for the information of etymologists in the course of which he quotes the forms gatvā and gatam as instances of the elision of the final consonant, and jagmatuḥ and jagmuḥ as those of the elision of the penultimate vowel (of the root). This clearly proves that the root gam as such was fully abstracted, and from the off-hand and unostentatious manner in which he refers to it, it would seem that he is not the first to abstract the root, but that it must have been done already before him. And what applies to the particular instance of the root gam evidently applies to the category of the verbal root as such.

Yāska uses two different terms to denote the two different concepts of the 'finite verb' and the 'verbal root'. He defines[18] (I,1) ākhyāta as bhāvapradhāna 'that (part of speech) which has becoming as its fundamental notion.' It is made clear further on that it is the pūrvāparībhūta bhāva 'an action still in process' that is expressed by an ākhyāta, whereas a completed action is expressed by an abstract noun. He does not define the term dhātu but merely gives its derivation : dhātur dadhāteḥ (I, 20) '(The term) dhātu comes from /dhā.' Besides its technical meaning in the grammatical literature, the word also generally means 'layer', 'constituent element' or 'the basic element'. It was then borrowed by the grammarians to denote the verbal root which is 'the basic element' of the word.

Liebich[19] says that Yāska does not make a clear-cut distinction between the two terms ākhyāta and dhātu, and employs them more or less synonymously. But on a consideration of all those passages in the Nirukta where the term ~~in~~ ākhyāta question occurs K.C. Chatterji[20] has rightly shown that it means 'a finite verb' alone whenever it is used by Yāska himself, whereas in the two passages[21] where it means 'root' Yāska is directly quoting from his predecessors - which explains the use of the word in the different signification. Both these latter passages refer (the first in a general way; the second in a particular case) to the verbal origin of the noun and the use of the term ākhyāta instead of dhātu is to be accounted for by supposing that either these older grammarians had then still not penetrated through the finite verb to the verbal root or, more probably, even after abstracting the root they might have still continued using the older nomenclature. On the other hand, while Yāska always uses the term dhātu for the root, we have in the Nirukta at least one set of passages where the term dhātu is used with reference to, not the roots, but the concrete verbal forms collected in the Nighaṇṭu : jvalatikarmāṇa uttare dhātava ekādaśa (II, 28); kāntikarmāṇa uttare dhātavo'ṣṭādaśa (III,9) etc. But here also Yāska is more or less simply reproducing the descriptive remarks that had probably already come to be appended to the Nighaṇṭu before him. This also shows that like ākhyāta, the term dhātu also once meant 'finite verb.' With this meaning a dhātu might be looked upon as the basic element of the sentence since a verb is, so to say, a key-word in a sentence.[22] It would seem that later on the two terms were particularised

to denote two different ideas, ākhyāta meaning 'finite verb' and dhātu 'verbal root'.

But there is also an intermediate stage in the denotations of the term dhātu. It seems that at one time the term dhātu was used to denote what we would call the Present-stem, bhava-, dīvya-, sunu- etc. The sole evidence for such an assumption is the existence of a technical term sārvadhātuka (and of its counterpart, ārdhadhātuka). This term sārvadhātuka, which is undoubtedly pre-Pāṇinian and is also used by Pāṇini and Śarvavarman, literally means '(endings) coming after the whole root' and is practically a designation of suffixes added to the Present-stem. This sort of designation makes it at once clear that at the time the term was coined the various elements forming the various Present-stems were regarded as an integral part of the root. In other words, e.g. instead of regarding that a is added to bhū in forms like bhávati they rather regarded that a of bhava- was dropped in forms like babhū́va etc. Bhava- thus was called sarvadhātu ('the whole root', and bhū, on account of the alleged loss of a, ardhadhātu 'the partial root'. What a flood-light thrown upon the grammatical thought in the pre-Pāṇinian period by this development of the ideas expressed by the term dhātu ! It must have been a slow and tortuous process, starting with the concrete verbal forms, penetrating through these to the Present-stem, the grammatical acumen ultimately tearing open the bare abstract root ! And this epoch-making discovery had already taken place before Yāska !

From the Nirukta (especially II,1-2) much other useful information can be had regarding the general stage of knowledge in its days as far as the subject of the verbal roots is concerned. In II,2 Yāska says that when a root contains a semi-vowel in close contact with a vowel it is called dviprakṛtīnāṁ sthānam 'a place of (or occasion for) two bases'[23] and that when a given form cannot be derived from the well known base, one should seek to derive it from the other one.[24] Here he is evidently referring to the phenomenon of Saṁprasāraṇa though the technical term does not occur and in its place the merely explanatory expression dviprakṛtīnāṁ sthānam is used.[25] Like the Saṁprasāraṇa, the phenomenon of guṇa was also known and is referred to by Yāska in X,17.[26] The endings which do not cause guṇa and the vṛddhi i.e. the weak endings are here called nivṛttisthānas.[27] There are certain general observations (in II,2) on the roots which will do credit even to a modern linguist. Thus he makes a distinction between the naigama (i.e. Vedic) and the bhāṣika (i.e. belonging to the spoken language) roots, and remarks that sometimes derivatives from Vedic roots are seen to be current in the classical language, and vice versa. He had also observed the different usages in different localities and remarks that in the case of certain roots verbal forms alone are used among certain people, and derivatives alone among others. Lastly, when he says tatrāpy eke'lpaniṣpattayo bhavanti he might be referring to the circumstance that certain roots are less productive than others.[28]

Coming to the technical aspect, it is already mentioned above, that even after the full abstraction of the

root Yāska cites roots in the form of 3 sing. Pres. This had also been done in the Nighaṇṭu, but there is a difference between such forms as they appear in the Nighaṇṭu and the same appearing in the Nirukta. The forms of the Nighaṇṭu impress themselves as being still forms of the living language, while in the Nirukta they are more or less mechanised forms, - forms conditioned in a grammatical set-up. Thus aniti, e.g., in the Nighaṇṭu (II,14) is still one of the many related forms, chosen to represent the common element in those forms, - the element which was suspected but was not fully abstracted - and this function the form aniti discharges without losing its identity. In the Nirukta (XI,47), on the other hand, it is a mechanical form which means nothing more and nothing less than the root an. This mechanical character is brought into bold relief by the fact that Yāska treats them, for the sake of convenience, as declinable stems, as if they were so many verbal nouns in -ti (like gati, mati, kṛti etc.), and so we have a host of forms like avatiḥ, kaṇatiḥ, śavatiḥ[29] etc. in the Nom. Sing. and avateḥ, Īṣateḥ, kramateḥ etc. in the Abl. Sing.[30] Further mechanisation comes in with the Ātmanepadin roots. They are treated as though they were Parasmaipadin evidently because forms in -ti can be declined more easily than those in -te. Thus we have dayate in the Nighaṇṭu (IV,1) but dayatiḥ in the Nir. (IV,17), nasate in the Nigh. (II,14), but nasatiḥ in the Nir. (VII,17).[31] In one extreme case we even find that the concrete form is altogether ignored, and the representative form is simply made by adding -ti directly to the root (with a guṇa-strengthening). Thus he says (II,25) ṛtur arter gatikarmaṇaḥ "The word ṛtu comes from arti (i.e.

/ṛ) meaning 'go'", as against Nighaṇṭu's iyarti (II,14).[32]

But, on a few occasions Yāska uses another method also. It is to add a weak -i to the root. Thus we have the forms like īḷiḥ (VII, 15; also the usual 3 sing. Pres. form īṭṭeḥ VIII, 7), gṛbheḥ (X,23), tviṣeḥ (VIII,13) and dhiṣeḥ (VIII,3). These forms are also evidently made in imitation of corresponding nouns in -i (like ruci, dyuti etc.) and are employed because they too are likewise easily declinable forms.[33] After Yāska both these forms, the 3 sing. Pres. and the one in -i, have been very extensively used in all the periods of Sanskrit grammatical literature. They have been recognized officially as such by Kātyāyana in his Vārttika ik-śtipau dhātunirdeśe (under P. 3,3,108).[34]

Before we leave the Nirukta, we may note one or two individual instances. It was already recognised that in the forms like pratta and avatta the first t comes from /dā; and that the form āsthat came from /as 'throw' with an additional th as an augment[35] (for both, cf. Nir. II,2) - both of which are, by no means, small achievement.

From the Nirukta on the one hand to the Pāṇinian Dhātup. on the other is a gap which, in the complete absence of all the pre-Pāṇinian grammatical works, must be filled by speculation alone. That at the time of Yāska there were probably no texts like the dhātupāṭha seems plausible enough.[36] Whereas Yāska enumerates all the nipātas and upasargas, in the case of the verbs (as in that of nouns) he gives only a general definition of the verb and illustrates it by a couple of

instances. Whichever word conformed to that definition was to be looked upon as a verb; this indicates that there was as yet no list of verbs - no samāmnāya or pāṭha so to say - to which he could have referred and inclusion in which would give title to the designation of verb - such as, say, Pāṇini's Dhātupāṭha, inclusion in which makes a root according to P 1,3,1. But this state of affairs could not have lasted long. Vyākaraṇa in the last analysis means, at least in the case of regularly formed words in Sanskrit, their reduction to verbal roots, and no system of Sanskrit grammar, however crude, could go on long without some stock of well-listed roots. Pāṇini himself came at the end of a long line of grammarians, many of whom he cites by name. It would be natural to suppose that these grammarians had their own dhātupāṭhas. Occasionally, though rarely, we come across references to these pre-Pāṇinian dhātupāṭhas. Vopadeva, writing in the 13th century, says in the introduction to his Kavikalpadruma that before writing his new dhātupāṭha he studied the views of the eight ancient grammarians.[37] Among the names of these grammarians occur those of Indra and Āpiśali who were O Pāṇini's predecessors. Since the remark occurs in connection with the Dhātup. it follows that Vopadeva had studied the dhātupāṭhas of these pre-Pāṇinian grammarians, which apparently still existed in his days. Patañjali's gloss. illustrating the use of ā-/sthā in his commentary to the Vārttika under P. 1,3,22 is believed to refer to some grammarian who had regarded s instead of as as the root and had declared a and ā in forms like asti, āsīt etc. to be augments.[38] The same passage

occurs almost verbatim in the Kāśikā where the commentators tell us positively that the reference is to Āpiśali whose dhātup. they say, read 'sa bhuvi' instead of 'asa bhuvi' as in other dhātupāṭhas.[39]

These older works might have differed, as is hinted by the case of /as, in the matter of their contents and also the accuracy of presentation, according as they belonged to one period or the other in the development of the Sanskrit Grammar. Liebich[40] remarks that in the earlier stages of the dhātup. roots were probably given, as in the Nighaṇṭu, in the 3 sing. Pres. : bhavati, edhate and so on. He also thinks that to these had probably come to be added some of the important - difficult or irregular - forms of the various tenses and moods, in the manner of the later dhātupārāyaṇas. Both these opinions, however, appear to be pretty improbable. SInce the dhātupāṭhas as such are later than the Nirukta, and since the root had come to be isolated already before Yāska, it does not sound logical that the authors of the dhātupāṭhas should have reverted to the primitive form. Similarly the idea of collecting and explaining different forms of a verb, which presupposes more or less a specialised study of a particular branch of the subject, should have naturally suggested at a later date, and not in these early stages. Also the circumstance that the instruction in those days was oral and necessitated the texts to be briefest precludes the possibility of the inclusion of concrete forms in the dhātup.

There are certain features of the P.Dh. (features which have come down in the later dhātupāṭhas also) which

indicate that this oldest known dhātup. also may not be an entirely new work but is rather based on an older ground-work. The sequence of the ten classes, which does not follow any logical principle, and the haphazard treatment of the <u>curādis</u> seem to be too crude to have come from Pāṇini's pen; it rather seems that this feature was already established before Pāṇini who retained it as a time-honoured practice. The dhātup. contains the technical terms parasmaibhāṣa, ātmanebhāṣa (against parasmaipada and ātmanepada of the sūtrap.) and carkarīta (against yaṅluk of the sūtrap.) which are, as is well known, creations of Pāṇini's predecessors and seem to have been retained out of regard for them.[41] Often the sūtrap. is seen to modify and supplement the dhātup. : some roots which are read only in a particular class in the dhātup. are optionally assigned to some other class by the sūtrap.;[42] similarly, whereas the dhātup. makes use of the anubandha 'ir' to indicate that the particular root forms its Aorist stem optionally with a weak -a, the same fact in the case of some other roots is taught expressly in the sūtrap.,[43] although in many cases this could have been done by means of the anubandha itself. It shows that a particular pattern of the dhātup. had already come to stay before Pāṇini and that the latter retained it out of veneration for the established practice, although it was not perfectly logical and accurate.

On the basis of some of the above arguments, and some others which will be presently cited I.S. <u>Pawate</u>[44] has come to the extreme conclusion that the entire dhātupāṭha as it is, (excepting, of course, the meanings[45]) is the work of

Pāṇini's predecessors. In fact it is his thesis that Pāṇini got the dhātup., along with allied works, handed down to him as 'upadeśa' by his teachers. His line of argument is thus : The dhātup. is not a mere appendix to the sūtrap. because it contains a number of roots whose inclusion is not necessary for the purpose of the sūtrap. The dhātup. therefore must have been originally meant to be an exhaustive list of all the roots independent of any sūtrap. The credit of compiling this exhaustive dhātup. must go to the Nairuktas and the grammarians like Śākaṭāyana who held that all nouns were derived from verbs. From these predecessors of Pāṇini the dhātup. came to be handed down to him as the 'upadeśa'. That Pāṇini could not have a hand in the making of this exhaustive dhātup. also follows from the circumstance that Pāṇini was not a grammarian of the type of Śākaṭāyana, but rather agreed with Gārgya, since he held that the uṇādi formations were irregular. Whatever modifications Pāṇini wanted to make in the dhātup., he did by means of the Aṣṭ. as is clear from the fact that in the sūtrap. are to be found sūtras which supplement, modify, or even go against the dhātup. All these changes were carried out by means of the sūtrapāṭha, keeping the dhātup. intact, because the dhātup. being an upadeśa was regarded as sacred and Pāṇini did not want to tamper with it. As an additional proof Pawate adduces the existence of pre-Pāṇinian terms in his dhātup. He further cites the case of what are called the sautra roots which, though Pāṇini had occasion to mention in the sūtrap. he did not actually incorporate in the dhātup. for the same reason of sacredness of the dhātup. All this, concludes Pawate, shows that the

author of the dhātup. and Pāṇini are two entirely different persons, that dhātup. was composed long before Pāṇini, and that the latter retained it exactly in the same condition in which he had received it, making all the desired changes through the medium of the sūtrap.

Let us examine this theory briefly. Its starting point, viz. that the dhātup. contains a great deal of roots which are useless for the Aṣṭ. is itself erroneous. Every single root, whether of a general nature or having some special characteristic and therefore requiring a reference in the Aṣṭ., must be actually read in the dhātup. without which it does not get the nomenclature dhātu according to 'bhūvādayo dhātavaḥ' P. 1,3,1: 'bhū and the following (vocables, listed in the dhātup. are called) dhātus.' Even supposing that the word bhūvādayaḥ means 'like bhū,' and the sūtra therefore means that vocables expressive of action are called dhātus (thus making it unnecessary to read every such vocable in order that it may get this nomenclature), still the roots would have to be listed in order to furnish them with the necessary accents and anubandhas; lastly, even if a few roots which take the normal vikaraṇa (i.e. belonging to the class I), carry an udātta accent, and have no anubandha could have been spared, still even in their case, as Kātyāyana tells,us, their pāṭha is essential to prevent them from corruption like āṇapayati etc.[46] Thus Pawate's basic assumption itself, that a number of roots in the dhātup. are unnecessary for the purpose of the sūtrap., is untenable.

The other reasons advanced by him are also inconclusive, for they equally apply to the later schools also where the dhātup. and the sūtrap. are admittedly known to be the works by one and the same person. Thus like Pāṇini, Candra (1,1,88), Kātantra (3,2,33 vā.) and Hemacandra (3,4,73) assign, through sūtrap., the roots bhrāś etc. to both I and IV class; like Pāṇini, again, the optional formation of a-Aorist is taught in the case of jṝ and other roots, through sūtrap. (and not by an anubandha in the dhātup.) by C.(1,1,75), Kt. (3,2,28 Vā.) and H (3,4,65) also. Similarly the terms ātmanebhāṣa etc. while they do not occur in the respective sūtrap. nevertheless occur in the dhātup. of Kt. and H.

Pawate speaks of 'sūtras' (i.e. in the plural) running counter to the teaching of the dhātup. though actually he has cited only one instance, viz. the sūtra 'dhinvi-kṛṇvyor a ca' (3,1,80). This rule says that the roots dhinv and kṛṇv, which have been read in the first class (624 and 629 respectively) form their present-stems with the vikaraṇa -u and that at the same time their final -v is replaced by -a, - in other words these roots form their present stems as dhinu and kṛṇu, the replaced -a being elided by 'ato lopaḥ' (P 6,4,48). This difference of view between the sūtrap. and the dhātup. is explained by Pawate on the hypothesis that what goes by the name of Pāṇini's dhātup. must have been already composed before him when forms like dhinvati, dhinvataḥ etc. were current; that in course of time they became obsolete and gave place to dhinoti, dhinutaḥ etc.; and that through sūtrap. Pāṇini has made the necessary correction of the dhātup.

which he had received as his upadeśa.

Now, the only sure thing that can be accepted in the above reasoning is the fact that the two roots have been read in the first class. Beyond that there is no independent evidence to show that the forms like dhinvati dhinvataḥ etc. actually existed at some time. As far as the testimony of the recorded literature goes, the forms with the present stem dhinu alone occur, and nowhere with dhinva;[47] secondly such a change-over from the thematic to the athematic base is against the tendency of the language which is quite in the opposite direction. I think that the forms like dhinvanti (which admit, theoretically, of dhinva as well as dhinu to be the Present-stem) gave rise to the mistaken concept of dhinva being the Present-stem and consequently the roots were listed in the first class. Be it as it may, the fact that there is a contradiction between the sūtrap. and the dhātup. cannot be denied. But it does not follow, merely from this contradiction, that the Pāṇinian dhātup. was composed by somebody before Pāṇini, for the same contradiction can be pointed out in some post-Pāṇinian schools in which the same person wrote dhātup. as well as the sūtrap. At least two of Pāṇini's successors, C and J read these roots in the first class itself, only they improve on Pāṇini's technique by declaring the vikaraṇa to be -nu, and by laying down a substitution of dhi and kṛ for dhinv and kṛṇv. Just as C and J did not actually remove the roots to the fifth class, but retained them in the first, presumably simply following the trodden path, so also Pāṇini might have read the roots concerned in the first class simply

out of regard for convention, and so this does not necessarily prove that the whole of the P.Dh. as it is is pre-Pāṇinian. Thus it will be seen that this rule which Pawate regards as 'the strongest piece of internal evidence that could possibly be adduced to show that the author of the Aṣṭādhyāyī is not the author of the Dh. P.' is simply no such thing. It only shows that with the grammarians sometimes only it was what was said that mattered, and not how it was said.

The argument based upon the sautra roots also does not prove anything. For, excepting sporadic cases like that of /tu the majority of them have continued, in all the later schools, to be sautra, in that they were never admitted into the dhātup. proper. Not only this, but their number has increased from seven in the Pāṇinian school[48] to forty-two in the Kkd.[49] It is claimed that the sacredness of the dhātup. prevented Pāṇini from admitting these roots to the dhātup. One may ask : What prevented the later grammarians, who were the authors of both the sūtrap. and the dhātup. from reading these roots into the dhātup.? The truth seems to be that certain roots, which were not quite full-fledged but occurred only in sporadic forms were, on that account, not included in the dhātup., but were only mentioned in the sūtrap. when the operation concerned was taught.[50] The practice was followed by later dhātupāṭhas also. Consequently, the mere fact of sautra roots by itself does not prove the pre-Pāṇinian origin or the sacred nature of Pāṇini's dhātup.

One more point : Pawate maintains that all the modifications that Pāṇini wanted to make in the dhātup. were

effected through sūtrap. by framing new rules, for the dhātup. being upadeśa was something too sacred to be tampered with. Now, his own thesis is that Pāṇini got both the sūtrap. and the accessary works like dhātup. as upadeśa from his Ācāryas. Also, Pawate's, on own statement, Pāṇini has enlarged the original sūtrap. (which he got as his upadeśa) wherever necessary. Now, if Pāṇini could tamper with the sūtrap. which was not less sacred than the dhātup. what could have prevented him from making the necessary changes in the dhātup. ? Any way, it passes one's imagination why the dhātup. should have been more sacrosanct than the sūtrap. itself !

The whole trouble with the theory is that its starting point itself, viz. that Pāṇini's dhātup. was originally meant to be an independent collection of roots without being subordinate to any sūtrap. is not proved. True, there are often inconsistencies and imperfections in the dhātup. but that only shows, as has been already stated above, that a certain pattern of the dhātup. was already fixed before Pāṇini and that in spite of its imperfections Pāṇini retained it, even as his successors did to some extent, out of regard for the established practice.

Let us now turn once more to the rule 'bhūvādayo dhātavaḥ' which is already referred to above. The arrangement of roots in the first class in the P. Dh. is such that the block of roots in consonants comes first, and then follow the roots in vowels. The root bhū, which is found at the top of this dhātup. is, therefore, from this point of view, out of

place here and should have properly been read somewhere between 945-1018 (the block of roots in vowels), preferably after 992.

Then why is it placed at the top ?

The commentators explain this by saying that, firstly, by taking the first position it performs the office of a maṅgala because it reminds one of the first mahā-vyāhṛti bhū which has the same sound; and that, secondly, it deserves this position since its meaning, viz. 'existence' (sāttā), is at the basis of all the actions.[51] Whether one believes in the first reason or not, the second is certainly satisfactory. But we can even go further and infer that the practice of reading the root bhū at the beginning, and framing a suitable rule like 'bhūvādayo dhātavaḥ' must have been older than Pāṇini. The root bhū must have, at a very early date, come to be regarded as the most representative root, denoting as it does the idea of 'being' which is at the basis of all actions. bhū is, so to say, the root par excellence. It is possible that the sentence bhūvādayo dhātavaḥ originally meant simply 'words of the type of bhū (i.e. those expressive of action or state) are roots'; that it subsequently came to be attached to a particular system of grammar when it underwent a slight change in the meaning and came to mean 'words listed with bhū at the top are roots.' Thus, along with the other reasons given by the commentators, the probable circumstance that Pāṇini has retained the older definition also might have been responsible for retaining the root at the top, though it is not in keeping with the arrangement of roots found in this Dhātup.

That the definition is quite older than Pāṇini is also indicated by the anomalous ~~letter~~ saṁdhi v found in the word bhūvādayo, the regular word expected being bhvādayo.[52] This has given quite a headache to the scholars, both ancient and modern. At the same time, curiously enough, it has also come in handy to the commentators who have manipulated it to justify their own interpretations of this sūtra. The author of the Ślokavārttikas has explained the word bhūvādayo in three different ways thus:[53] (1) bhūvādayo = bhū + v + ādayo 'bhū and the following (verbs listed in the dhātup.)', the letter v being meant only for the sake of the maṅgala (in the middle of the work); (2) bhūvādyō = bhū + vādayaḥ (= bhuvo vādayaḥ) '(words) expressive (vādayaḥ) of action (bhū)'; here bhū is taken as an abstract noun in the sense of bhavana = kriyā, and vādi an agent noun from /vad 'speak, express'. (3) bhūvādayo = bhū + vā + ādayaḥ '(verbs) beginning with vā and having the nature of bhū (i.e. which are expressive of action)'; here ādi is taken to be connected with both bhū and vā, meaning prakāra when going with bhū, and vyavasthā with vā.[54]

It is with the last interpretation that we are interested in at the moment, for it has given rise to a myth that there had probably been some dhātup., either an independent one or a version of the P.Dh. itself, which began with the ad-class, with /vā at its head. Though the part of the vārttika containing the last two interpretations does not appear in the Bhāṣya, these interpretations have found a place therein. Referring to this passage Pawate remarks : 'It seems that the

Pāṇinians themselves had their dhātupāṭha in more than one versions. The existing Dhatupatha begins with the root भू but Patanjali seems to speak of another version in which the अदादि s began with the root वा , that is in which the present अदादि s were वादि s, and in which the वादि s and not भ्वादि s were placed at the beginning of the Dhatupatha.[55] Similarly K. C. Chatterji observes : "It is just possible that in some ancient Dhātupāṭha vā stood at the head of adādi roots and so some predecessor of Pāṇini framed the rule 'bhūvādayo dhātavaḥ' which was taken over by Pāṇini.'[56]

Let us see what the passage in the Bhāṣya really means. Kātyāyana points out certain difficulties which, he says, would follow if the nomenclature of dhātu were to be dependent only on the inclusion in the pāṭha. To obviate these difficulties it is proposed that the definition be changed to kriyāvacano dhātuḥ, or better, to make it applicable to all the roots (including those like as which do not denote any action), bhāvavacano dhātuḥ. But even these latter definitions are found to have their own defects and it is felt that the ideal definition should emphasize both the aspects, viz. (1) inclusion in the pāṭha, and (2) expressiveness of kriyā or bhāva. Patañjali then points out that it is not necessary to change the definition, and that the definition bhūvādayo dhātavaḥ, even as it is, brings out both these aspects equally well. He then proceeds to show how the term bhūvādayaḥ is to be differently interpreted according as the root is supposed to be a kriyāvavacana or a bhāvavacana. 'If one accepts the view that a bhāvavacana is a root,' he says 'then the word ādi going with vā means

vyavasthā, and the other going with bhū means prakāra.' ('yadā tu bhāva vacano dhātur ity eṣa pakṣas tadā vā ity atra ya ādiśabdaḥ sa vyavasthāyām, bhū ity atra ya ādiśabdaḥ sa prakāre. vā ityevamādayo bhū ityevaṁprakārā iti.') Here Patañjali simply seems to show how the dhātup. should be re-shaped, so that it would serve the needs of this interpretation; viz. the ad- class should be placed at the beginning of the dhātup. and vā should be the leading root. Kaiyaṭa says so in so many words : ' adādīnām ādau vā gatigandhanayor iti paṭhitavyam. adādigaṇo'pi gaṇānām ādau. tena sarve dhātupāṭhasaṁniviṣṭā gṛhītā bhavanti.' The inference, therefore, that we have here a reference to some ancient dhātupāṭha in which the ad- class began with the root vā, or that there was such a version of the P.Dh. which is now lost seems little warranted.

There are two rules in the Aṣṭ., 'ṣidbhidādibhyo'ṅ ' (3,3,104) and ' nandi-grahi-pacādibhyo lyuṇinyacaḥ ' (3,1,134) which teach certain primary formations from the groups of roots mentioned therein. The peculiarity of these two rules is that though they lay down the operation with reference to gaṇas in the usual way, actually there are no such gaṇas in the dhātup., but the various primary nouns themselves are listed under these rules in the gaṇapāṭha (much in the manner of the prātipadika-gaṇas), the sūtrap. being supposed to refer to the roots from which these nouns are formed. Pawate takes this as an additional proof for his theory that the P.Dh. had another version which is lost, and holds that the lost version might have contained these gaṇas of roots. Now if we look

at the words read in the bhidādi gaṇa we will find that they come from roots which belong to more than one - in fact almost all - the Present classes. It is self-evident that a gaṇa can be formed only when the constituent roots (or, at least a sufficient number of them) belong to one and the same Present class. When, as in the present case (and also in that of gaṇas mentioned in 3,1,134) roots concerned are spread over a number of Present-classes it is physically impossible to form the gaṇas. Being thus unable to use the usual method, the author had to take recourse to some other one. The absence of these gaṇas in the dhātup. is to be thus explained on the ground of their sheer impossibility, and it cannot suggest any lost version of the dhātupāṭha with these gaṇas, which, as just said, is impossible as long as the present arrangement of the dhātup. on the basis of the Present-stem is not altered.

But the whole idea of the vādi-version of the dhātup. is based on what is only a doubtful and alternative interpretation of the expression bhūvādayaḥ. This interpretation, along with the second, has to be set aside as being forced; their avowed object being to show that this definition includes both the necessary aspects mentioned above. As in the case of similar definitions like sarvādīni sarvanāmāni (P 1,1,27), prādayaḥ (1,4,58) etc. bhūvādayaḥ is to be naturally split into bhū ādayaḥ, meaning that the vocables listed with bhū at their head are called roots, it being automatically understood that they are called roots only when they express an action; so that words spelt identically but having a different meaning do not get the name of root. The first interpretation,

alone, is therefore acceptable. We need not however accept that the letter v is for the sake of the maṅgala. Indeed it is not clear how the beginning of the third chapter of the book I can be regarded as the middle of the work requiring maṅgala; nor is it easy to see how the letter v is capable of performing that function (say, like the word atha), this character of this sound not being known anywhere else. Nor need we suppose that Pāṇini here 'merely names two important roots - one of the first conjugation (i.e. bhū) and one of the second (i.e. vā), and says that roots are of the nature of these.'[57] As in the parallel cases of sarvādīni, prādayaḥ etc. mentioned above, it is reasonable to suppose that only one instance is mentioned here, there being no apparent reason why Pāṇini should have made this a special case and have given two instances. It just seems that bhūvādayaḥ is archaic for bhvādayaḥ. Semivowels are known to appear after i, u when dissimilar vowels follow in the earlier stage of the language.[58] This shows that Pāṇini has made use of the definition which was coined long before him and had already established itself. And since he retained the old definition he had also to place /bhū at the head of the dhātup. even though it was not in keeping with the general arrangement of roots.

With this we have finished our survey of the pre-Pāṇinian literature in the matter of the development of the grammatical thought regarding verbal roots. We now proceed in the subsequent chapters to study the dhātupāṭhas. I first give in the next chapter a brief account of all the existing important dhātupāṭhas.

FOOTNOTES TO CHAPTER - I

1 RV 8,5,31.

2 RV 6,66,9.

2A For an interesting and searching recent study of the etymologies in the Nir., see Siddheśvara Varma, 'The Etymologies of Yāska.' According to the author's calculation, the total number of etymologies in the Nir. is 1298, of which only '59 are absurd.' After a careful consideration of the merits and defects of the Nir. the author comes to the conclusion (p.16) that "in spite of an enormous number of crudities in Yāska's etymologies, the epithet of a 'primitive etymological science' cannot be denied to his system."

3 Einführung II, 7.

In the whole range of Vedic literature there are no less than 833 etymologies as collected by Fatah Singh in his 'Vedic Etymologies.'

4. Einführung II, 6.

5. Einführung II, 18.

6. AB 3,32,1.

7 'vāg vai parācy avyākṛtā'vadat. te devā Indram abruvan, imāṁ no vācaṁ vyākurv iti. ..... tām Indro madhyato'vakramya vyākarot.' Sāyaṇa in his introduction to the bhāṣya on the RV. (I, p.26) explains the passage thus : tām akhaṇḍāṁ vācaṁ madhye vicchidya prakṛtipratyayavibhāgaṁ sarvatrā'karot. He gives a detailed and lucid explanation of the same passage under TS 1,14 (Anandashrama ed. Vol. I, p. 555) : yeyaṁ vaidikamantrarūpā vāk sā pūrvaṁ parācī samudraghoṣavad aikyarūpeṇa daṇḍāyamānā tasyāṁ vācy etāvad ekaṁ padam, tasmin pade'pīyaṁ prakṛtir ayaṁ pratyay ity evaṁ vibhajya sarvataḥ

karaṇam vyākaraṇam tadrahitatvād avyākṛtaivā'vadat pravṛttā tām Indro madhyato'vakramya vākyapadādirūpeṇa tatra tatra vicchidya vibhinnām kṛtavān.

8 Before deciding this meaning of the ending, similar words like kṣatra, śrotra, dātra etc. must have been, of course, considered.

9 Einführung II, 18.

10 Einführung II, 18.

11 as, e.g. in AB V,5,12 where RV 1,98,1 which actually contains the word jātaḥ is called jātavat.

12 Batakrishna Ghosh, Aspects of pre-Pāṇinian Sanskrit Grammar, B.C. Law Volume, Part I, p. 340.

13 Only one recension adds the word nāmāni in the descriptive remarks after the various groups of nouns, while no word for 'verbs' occurs in similar remarks after the groups of verbs in any recension. It is Yāska who describes in the Nirukta (I, 20) the two divisions thus : 'etāvantaḥ samānakarmāṇo dhātavaḥ' and 'etāvanty asya sattvasya nāmadheyāni'. The word dhātu is here used in rather a loose sense, since the Nighaṇṭu contains concrete verbs, and not verbal roots.

14 That some of these are not really verbal but nominal forms is already pointed out above.

15 To take just one group by way of illustration, Nigh.III,19 contains, among others, the following forms which represent a sizable variety of forms : īmahe, yāmi, daddhi, mimiḍḍhi, pīparat, yantāraḥ and iṣudhyati; occasionally the verbal forms are given along with the pre-verbs : ā cake (II,6), ni vapantu (II,19), vi caṣṭe (III,11), ava tirati (II,19) etc.

16 For the philosophical import of this method, and the contrast it affords with the Greek and Latin grammar which use 1sing. Pres. instead for the same purpose, cf. K.C. Chatterji, Technique, Part I, pp. 16-17; also Liebich, Einführung II, 27.

17 V. K. Rajavade, Yāska's Nirukta, pp. 201, 205. However in the verbs quoted by him as not attested in the RV, there are some which are actually met with there, while some others occur in the AV, e.g. kasati, cyavate, ardati, aniti, jrayati, etc., and so they cannot be called assumed or coined.

18 And his is the first definition of the verb to appear in the annals of the Sanskrit grammar.

19 Einführung II, 25, 30.

20 Technique, pp. 68-69.

21 (1) nāmāny ākhyātajānīti Śākaṭāyano nairuktasamayaś ca (I,12); (2) tribhya ākhyātebhyo jāyate iti Śākapūṇiḥ (VII,14).

22 Cf. Wackernagel, Altind. Gram., Vol. I, p. LXIX, footnote 2. But when Wackernagel goes further and says that this meaning continues down even in Pāṇini in the two terms sārvadhātuka and ārdhadhātuka he is certainly not right for, as we shall presently see, the word dhātu in these two terms is equivalent to 'Present-stem.'

23 That is how I translate the word siddhāyām, taking it to be an attribute of the noun prakṛtau understood. Sarup evidently understands vikṛtau as the substantive and translates : 'if an accomplished form is not derivable (anupapadyamānāyām) from one base' (p. 22). This is questionable. Rajavade translates : 'When the actual or unaltered root is inapplicable'; this is slightly better.

24 Actually, as Rajavade (p. 302) has pointed out, this definition is too wide and would cover roots like yat, yam, radh, ram, lajj, vam, vrīḍ etc. which do not show the phenomenon of samprasāraṇa. The roots which actually undergo this phenomenon have been listed by grammarians, e.g. by Pāṇini in 6, 1,15-16 with their attendant circumstances. - Incidentally the recognition of dviprakṛtīnāṁ sthānam constitutes a progress over AB which, still unaware of this phenomenon, derives (I,2,1) the word iṣṭi 'sacrifice' from /iṣ 'desire'.

25 The word sthāna has here still its general meaning of 'place', 'position' or 'occasion', and refers to the particular combination of sounds in roots, leading to samprasāraṇa. Later on it seems to have been restricted to endings, causing certain phenomena, as in the term sarvanāmasthāna (strong endings of declension), and probably also in nivṛttisthāna (weak endings in the verbal flexion).

26 śeva iti sukhanāma, śiṣyateḥ. vakāro nāmakaraṇaḥ, antasthāntaropaliṅgī, vibhāṣitaguṇaḥ (X, 17). - The related term vṛddhi does not occur, but there is no doubt that this phenomenon, too, must have been noticed.

27 The expression nivṛttisthāneṣu is correctly explained by Durga as guṇavṛddhinivṛttisthaneṣu. Liebich wrongly takes it to be the same as ārdhadhātuka when he says : 'für ārdhadhātuka sagt Y. nivṛttisthāna' (Einführung II, 32).

28 The word eke evidently requires dhātavaḥ as the substantive. But since the subject of dviprakṛtīnāṁ sthānam is apparently continued in this sentence, instead of taking the statement as referring to roots in general it is perhaps better

to suppose that it applies only to such roots as undergo saṁprasāraṇa and that some roots are taught here to have comparatively fewer forms from the saṁprasāraṇised base than from the normal one.

29 Whereas the nouns in -ti of the real language are feminine, these purely grammatical formations on the other hand, are masculine, evidently because they are meant to be in apposition with the term dhātu. That Yāska treats them as masculine is evident from constructions like 'śavatir gatikarmā ..... vikāram asya āryeṣu bhāṣante' (II,2) where the masculine form asya is used with reference to śavati.

30 Yāska similarly treats indeclinables also as declinable stems. Cf. expressions like 'ivo'pi dṛśyate (I,10)'.

31. Liebich (Einführung II, 27) cites rocateḥ as an instance of an ātmanepadin root turned into parasmaipadin; but this particular instance is inconclusive, for rocateḥ might be Abl. sing. of rocate as well as of rocati, cf. P 6,1,110.

32 Curiously enough, the form arti recurs in Pāṇini also : sartiśāstyartibhyaś ca (3,1,56). What is still more curious is that Sāyaṇa actually uses it as a concrete form : suṣṭhu arti gacchatīti svarudakam (Bhāṣya to RV I, 100,3), and a similar form pratyṛtaḥ under RV I, 59,6. - Incidentally, the similar form sarti in the above quoted rule from P may be noted. Liebich (Einführung II, 51) cites a similar form neti from the Vāj. Prāt. III, 87.

33 These forms also are similarly regarded as masculine.
34 = iktipau dhātusvarūpe Kk. p. 133.

35 Cf. asyates thuk P 7,4,17. Modern scholars are more inclined to regard the form as coming from /sthā itself, with a transfer of root-Aorist to a-Aorist, and weakening of ā to a, Cf. Whitney, Gram. 847; Macd., Gram. 507a.4.

36. On this point see Liebich, Einführung II, 33.

37, Indraś Candraḥ Kāśakṛtsnāpiśalī Śākaṭāyanaḥ
Pāṇinyamara Jainendrā jayanty aṣṭādiśābdikāḥ.
matāni teṣām ālokya sarvasādhāraṇaḥ sphuṭaḥ
dhātupāṭhaḥ .... (Kkd. 2-3).

38 Āṅaḥ sthaḥ pratijñāna iti vaktavyam. astiṁ sakāram ātiṣṭhate. āgamau guṇavṛddhī ātiṣṭhate. vikārau guṇavṛddhī ātiṣṭhate (Bh. Vol. I, p. 280). The last sentence is not read by some Mss.

39 The printed Kāśikā reads astisaṁkāramātram ātiṣṭhate. vikāro guṇavṛddhī ātiṣṭhate, which is evidently corrupt. On this Jinendrabuddhi comments thus : sakāramātram asti-dhātum Āpiśalir ācāryaḥ pratijānīte. tathā hi, na tasya Pāṇiner iva 'asa bhuvi' iti gaṇapāṭhaḥ; kiṁ tarhi ? 'sa bhuvi' iti sa paṭhati. The remarks of Haradatta also are to the same effect. It is not known whether this dhātup. of Āpiśali was actually before these commentators from which they cited, or whether 'sa bhuvi' is just a reconstruction on their part. If the first alternative is accepted, it will be an important testimony showing that even before Pāṇini roots were given along with their meanings in the dhātup. and, in some cases like the present one, in identical form as in the P. Dh. – see also Pisani, A Note on Āpiśali, Journal of the Oriental Research Institute, Baroda, Vol. 5, No. 3.

40 Einführung II, 67.

41 It must, however, be pointed out that though these terms are commonly found in the Mss. and editions of the P. Dh. their appearance there is open to grave doubts. The pada in this dhātup. is indicated by means of the accent on the anubandha-vowel. So all that is needed is to say that so many roots are udāttetaḥ, so many anudāttetaḥ etc. The further addition of 'parasmaibhāṣāḥ,' 'ātmanebhāsāḥ' is quite superfluous and so raises doubts regarding their authenticity. Since, however, the terms are explained and declared as belonging to the pūrvācāryas by Maitreyarakṣita, they must have found a place there at least before him. It is important to note that these terms (as also the usual ones like parasmaipadinaḥ) are wholly absent in Kṣīrasvāmin's version of the P.Dh. and so confirm the doubts raised above.

42 P 3,1,70.

43 P 3,1,58 etc.

44 Structure, pp. 5-31.

45 The admission of the meanings in the dhātup. is post-Pāṇinian, for which see Ch. IV.

46 Patañjali holds a different view; relying on the śiṣṭaprayoga he thinks that the listing of these roots could have been dispensed with. But we are more concerned with the view of the sūtrakāra himself who, and following him also the Vārttikakāra, hold the pāṭha to be essential.

47 From the base dhinv, there is only one Aorist form recorded, viz. adhinvīt (Tāṇḍya Br. 4.10.1); there is no form from the base kṛṇv, Present or otherwise, except those like kṛṇvanti, which are liable to be misunderstood as having come

kṛṇva.

48 According to the M.Dh. (pp. 405-407) they are : ṛt, stambh, stumbh, skambh, skumbh, sāt, ju. The number is by no means fixed.

49 Kkd., St. 354-359.

50 As Vopadeva in his Kāvyakāmadhenu, commentary on the Kkd., says : pṛthak pāṭhas tv eṣām niyataprayogaviṣayatvāt.

51 ' ādau bhuvo nirdeśo bhūśabdasya mahāvyāhṛtismaraṇena māṅgalikatvāt, sarvajātyarthavyāpyarthābhidhāyitvāt .....' M.Dh. p. 3. 'sattālakṣaṇasyārthasya sarvadhātvarthavyāpakatvena prādhānyād ..... ajantadhātuvargam ullaṅghyāpi bhavatim eva prathamaṁ nirdiśati' Dh. Pr. pp. 2-5.

52 Cf. Bhāṣya under this rule : kuto'yaṁ vakāraḥ ? yadi tāvat saṁhitayā nirdeśaḥ kriyate, bhvādaya iti bhavitavyam; athāsaṁhitayā, bhūādaya iti bhavitavyam.

53 bhūvādīnāṁ vakāro'yaṁ maṅgalārthaḥ prayujyate
bhuvo vārthaṁ vadantīti bhvarthā vā vādayaḥ smṛtāḥ.
The second line is not found in the Bhāṣya, but it is read in the Kāśikā.

54 The second line is interpreted differently in the Nyāsa and also by Chatterji (Technique I, ppl 71-72). They appear to take the second line as containing only one alternative interpretation. But the following facts suggest that there are really two alternative interpretations there: (1) There are two vās in the second line; (2) the second alternative naturally ends with the end of the 3rd quarter, the expression

bhūvādayaḥ (and not bhvarthā, as Nyāsa understands it) being understood after it; and (3) the Bhāṣya also understands the last quarter as containing a third interpretation, since its explanation vā ityevamādayo bhū ityevaṁprakārāḥ (got by a double interpretation of the word ādi) is evidently a paraphrase of vādayaḥ and bhvarthāḥ in the Vārttika.

55 Structure, pp. 5-6.

56 Technique, Part I, p. 72.

57. Chatterji, Technique, Part I, p. 71.

58 TS, e.g. invariably writes suvar for svar; the form triyambaka is met with in the Baudh. Gr. Sū. III, 12 and is also imitated by Kālidāsa (Kumāra. III, 44). The grammarians call this phenomenon yaṇvyavadhāna and is referred by J 1,2,1; Śā. 1,4,73 etc. H (Bṛhadvṛtti to 1,2,21) actually mentions the instance of bhūvādayaḥ. See also Wh. Gram. 129c; and (particularly) Yudh. Mīm., Itihās I, pp. 21-23. Böhtlingk (Acht Bücher , p. 51) favours the view that here bhūvādayaḥ is deliberately used to hint at the sporadic occurrence of semi-vowels between i u on the one hand and dissimilar vowels on the other - since the phenomenon is not expressly taught in the Aṣṭ. Böhtlingk proposes an alternative explanation also, viz. that bhūvādi stands for all the roots, while bhvādi stands only for the roots of the first or the bhū class. But neither the expression bhvādi or bhūvādi appears anywhere else in the Aṣṭ. which would confirm this distinction; and Böhtlingk himself does not much favour this interpretation.